Special Issue

Electrode Design: Structure, Decoration and Applications

Message from the Guest Editor

Topics of interest include, but are not limited to, the following areas:

- Novel electrode architectures for sustainable electrochemical applications and electrochemical energy conversion and storage.
- Porous electrodes based on cellular, periodic or open-foam structures.
- 3D-printing of digitally tailored electrode architectures and materials.
- Advanced imaging and metrology of porous electrodes (e.g. X-ray computed tomography).
- Electrodes decorated with novel electrocatalysts (e.g. nanoparticles).
- Hierarchical micro- and nanostructures at electrode surfaces.
- Metal- and oxide-based electrocatalysts, including composites and alloy coatings.
- Application of electrocatalysts using thermal and hydrothermal methods as well as anodization, galvanic replacement, plasma discharge and vapor deposition techniques.
- Porous electrodes based on perforated plates, foams, meshes, cloths, felts and 'paper'. Templated porous scaffolds.
- Analytical and numerical models of current and potential distribution and hydrodynamics at such electrodes.

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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